

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-18. (Canceled)

19. (Currently Amended) A method of producing a digital printing ink, comprising the steps:

dispersing sublimatible coloring agents in a mixture of oligomers and monomers with a maximum particle size of 1 micron;

subsequently diluting same the mixture of oligomers and monomers comprising the dispersed sublimatible coloring agents with a mixture of monofunctional and multifunctional acrylic monomers until a viscosity of between 10 and 30 centipoises, measured at 25 °C, is obtained;

subsequently introducing a photoinitiator system, which causes ~~the~~ polymerization of the oligomers and monomers from the first step, in the presence of radiation; and

subsequently subjecting the resulting ink to a filtering process, to obtain particles by means of at least one filter, finalizing with a 1 micron filter

~~wherein characterized by the production of free radicals that react with the oligomers and monomers~~ when the resulting ink is printed on a media and ~~the a referred~~ radiation source is applied to ~~this the~~ ink, ~~fracturing the~~ molecules of the photoinitiator system are fractured and free radicals are produced that react with the oligomers and monomers, thus producing a polymer that sets the dispersing sublimatible coloring agents on the media.

20. (Currently Amended) The method according to claim 19, ~~characterized by having~~ comprising isobornyl acrylate among the monofunctional acrylic monomers, with a ratio of 25% to 55% of total acrylic monomers.

21. (Currently Amended) The method according to claim 19, ~~characterized by having~~ comprising bifunctional and trifunctional multifunctional acrylic monomers with a ratio of 44% to 75% of total acrylic monomers.

22. (Currently Amended) The method according to claim 21, ~~characterized by having~~ comprising hexandioldiacrylate among the bifunctional acrylic monomers.

23. (Currently Amended) The method according to claim 21, ~~characterized by~~ comprising tripropyleneglycoldiacrylate among the bifunctional acrylic monomers.

24. (Currently Amended) The method according to claim 21, ~~characterized by having~~ comprising trimethylolpropanetriacrylate among the trifunctional acrylic monomers.

25. (Currently Amended) The method according to claim 19, ~~characterized by having~~ comprising the source of radiation be at least one source of ultraviolet light.

26. (Currently Amended) The method according to claim 19, ~~characterized by having~~ comprising the source of radiation be a bombardment of electrons.

27. (Currently Amended) A digital printing ink produced according to the method of claim 19, wherein sublimatible coloring agents are dispersed in an organic medium dispersed in a mixture of oligomers and monomers with a maximum particle size of 1 micron; diluting it with a mixture of monofunctional and multifunctional acrylic monomers until a viscosity of between 10 and 30 centipoises, measured at 25 °C, is obtained; with a photoinitiator system which causes the polymerization of the oligomers and monomers from the first step, subjecting the resulting ink to at least one filter, finalizing with a 1 micron filter ~~characterized by having,~~

and comprising:

- isobornyl acrylate as the monofunctional acrylic monomer, with a ratio of 25% to 55%; and
- bifunctional and trifunctional multifunctional acrylic monomers, with a ratio of 44% to 75%.

28. (Currently Amended) The ink according to claim 27, ~~characterized by having~~ comprising hexandioldiacrylate among the bifunctional acrylic monomers.

29. (Currently Amended) The ink according to claim 27, ~~characterized by having~~ comprising tripropyleneglycoldiacrylate among the bifunctional acrylic monomers.

30. (Currently Amended) The ink according to claim 27, ~~characterized by having~~ comprising trimethylolpropanetriacrylate among the trifunctional acrylic monomers.